

ous Insects," p. 337.) The habits of this moth are very similar to those of our canker worms (*Anisopteryx*). When the moths appear in the autumn, the females crawl up the trunks of trees and lay their eggs on the branches. In this condition the insect passes the winter.

The following description of the larvæ was taken from the British Columbian specimens sent by Mr. Danby :—

Mature Larva.—Length, $1\frac{1}{4}$ inches. Head, round, bilobed at apex, chestnut-red, mottled. Mouth parts darkened. Dorsal region reddish-brown, darkened with fine black broken lines arranged as follows: A dorsal double stripe which widens a little in the middle of each segment and is shaded with pale yellow; two narrow subdorsal lines, rather indistinct, and placed on a reddish field; a double lateral stripe, the lower line of which is distinct and sinuous. Beneath this dorsal area the stigmatal area is bright yellow. The spiracles themselves are white, ringed with black, and are in the centre of blotches of reddish-brown shaded anteriorly with black. Ventral area, including thoracic feet and prolegs, pale yellow. Some specimens are much darker than others; in the darkest there is a broken supraventral stripe just beneath the substigmatal fold, sometimes running up on to it. The prolegs on 10th segment are also sometimes darkened exteriorly.

I believe the British Columbian insect to be identical with the English, as I can find no difference between either the moths or the caterpillars.

DESCRIPTIONS OF TWO NEW HYMENOPTEROUS PARASITES FROM WATER BEETLES.

BY WILLIAM H. ASHMEAD, WASHINGTON, D. C.

I can find no record of the breeding of Hymenopterous parasites from water beetles, in either the European or American faunas, and it is, therefore, with considerable pleasure that I here describe two distinct species of Hymenopterous insects, reared from water beetles by Mr. H. F. Wickham, of Iowa City, Iowa, belonging in genera not yet reported as occurring in our fauna.

The genus *Gausocentrus* is one of Förster's new genera erected in his "Synopsis der Familien und Gattungen der Ichneumoniden," 1868, p. 198, and appears a valid one, although, so far as I am aware, it still remains unrecognized by European authorities,

Cyrtogaster, Walker, is a well-known European genus well represented in our fauna, although now noticed for the first time, my collection containing not less than seven undescribed species. Kirchner records eleven described species in Europe.

SUB-FAMILY TRYPHONINÆ.

Tribe *Mesoleptini*.

Genus *Gausocentrus*, Förster.

1. *Gausocentrus gyrini*, sp. n.

♂.—Length, 3.5 to 3.8 mm. Black, shining, impunctate, clothed with a sparse, fine greyish pubescence, more apparent on face and metapleura, the apex of second abdominal segment broadly margined with red; petiole and second segment towards base subopaque, the former channeled, the latter feebly aciculated basally; petiole very long, rather slender and nearly as wide at base as at apex, about one-fourth longer than the second segment; third segment about two-thirds the length of second; fourth about half the length of third; following segments a little shorter subequal.

Head transverse, a little wider than the widest part of thorax, polished, except the face, which is feebly rugulose; clypeus subconvex, polished, truncate at apex; eyes larger, extending nearly to the base of mandibles; palpi pale or yellowish; mandibles pale rufous, bi-dentate, the teeth subequal; antennæ long, filiform, 20-jointed, reaching to base of second abdominal segment, the scape and pedicel obscure rufous, stouter than the flagellum and together not quite as long as the first flagellar joint, the flagellum black, cylindrical, of a uniform thickness throughout, finely pubescent, the joints gradually shortening toward apex.

Thorax smooth, with two well-defined parapsidal furrows; pronotum contracted, much narrower than the mesonotum; scutellum with a deep transverse depression at base, behind which it is convexly elevated; metathorax areolated above, rounded off posteriorly, with the pleura finally rugose; tegulæ and legs, including all coxæ, brownish-yellow, or pale ferruginous, the middle and hind tarsi and the posterior tibiæ above, subfuscous; tibial spurs, 1, 2, 2, not conspicuous; wings hyaline, the large stigma and venation dark brown; areolet pentagonal; second discoidal cell only about half the length of the third, the discoidal nervure very obtusely angulate a little before the middle of the third discoidal cell.

Hab.—Independence, Iowa.

Bred by Mr. H. F. Wickham, from pupa of a water beetle, *Gyrinus* sp.

FAMILY CHALCIDIDÆ.

SUB-FAMILY PTEROMALINÆ.

Tribe *Sphegigastrini*.Genus *Cyrtogaster*, Walker.2. *Cyrtogaster dineutis*, sp. n.

♀.—Length, 2.5 to 2.65 mm. Bronze-green, confluent punctate; sides of thorax and beneath bluish, or blue-green, with a conspicuous smooth triangular cupreous spot beneath the insertion of hind wing; metapleura with some long greyish hairs; palpi fuscous; mandibles piceous or rufo-piceous; scape, pedicel and legs, except coxæ, brownish-yellow; flagellum black or brown-black; coxæ metallic-green; wings hyaline, the nervures pale.

The head is broadly transverse, wider than the widest part of mesothorax, or a little more than three times as wide as thick antero-posteriorly, the punctation finer on face and towards the clypeus, the latter with some fine converging striæ; antennæ 13-jointed, inserted a little below the middle of the face, the flagellum subclavate, about one and a-half times as long as the scape; pedicel long, longer than the first flagellar joint and the two ring-joints combined; flagellar joints, after the first, wider than long. Thorax with the parapsidal furrows indicated only anteriorly, the pronotum transverse, much narrower than the mesonotum, the metanotum much produced at apex, confluent punctate, with a carina above; wings hyaline, the apical two-thirds pubescent, the basal one-third bare; the marginal and post-marginal nervures are nearly equal in length, about one-third longer than the stigmal, the stigmal nervure ends in a small stigma with a slight uncus.

Abdomen short ovate, attached to the produced portion of the metathorax by a short but distinct petiole, the segments two and three very large, occupying most of the surface, the second with a deep emargination at base, the segments after the third very short, subequal, all united not longer than the third.

Hab.—Independence, Iowa.

Bred by Mr. H. F. Wickham from the pupa of *Dineutes assimilis*, obtained September 1, the flies issuing September 11 and 12.

This species is probably only a secondary parasite, judging from other bred species of the genus in my collection.